

中国及缅甸北部蹄盖蕨科新分类群*

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NEW TAXA OF ATHYRIACEAE FROM CHINA AND UPPER MYANMAR

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关键词 蹄盖蕨科; 缅甸北部; 中国; 新分类群

1 花叶假蹄盖蕨 新变种

Athyriopsis japonica (Thunb.) Ching var. **variegata** W. M. Chu et Z. R. He, var. nov.
TYPE: Yunnan(云南), Kunming(昆明), Xishan(西山), under mixed forest in valley, alt. 2050 m, 1978-08-15. W. M. Chu(朱维明)8444 (holotype, PYU).

A typo differt pinnis supra maculis pallide cremeis secus costam ornatis, marginibus indusiorum non laceris sed denticulatis, sculpturis perisporii baculiformibus spiniformibusque longioribus.

2 大围山毛轴线盖蕨 新变种

Monomelangium pullingeri (Bak.) Tagawa var. **daweishanicolum** W. M. Chu et Z. R. He, var. nov. TYPE: Yunnan(云南), Pingbian(屏边), Daweishan(大围山), at the foot of cliff, in evergreen broad-leaf forest on mountain ridge, alt. 1500~1600 m, 1997-01-05, W. M. Chu *et al.* (朱维明等)29218 (holotype, PYU).

A typo differt laminis anguste oblongis, pinnis breviter falcato-lanceolatis vel oblique ovatis, apice acutis vel obtusis, auriculis pinnarum apice obtusis, rugis perisporii irregulariter reticulatis vel plicatis.

Yunnan(云南): Pingbian(屏边), Daweishan(大围山), at the foot of cliff, in evergreen broad-leaf forest on mountain ridge, alt. 1500~1600 m, 1934-03-09, Y. Tsiang(蒋英)13429; ib. 1956-06-15, Sino-URSS Exped. 3511.

3 百山祖短肠蕨 新种 图 1: 1~2

Allantodia baishanzuensis Ching et Chiu, sp. nov. TYPE: Zhejiang(浙江), Qingyuan(庆元), Baishanzu(百山祖), P. X. Qiu(裘佩熹)3945(holotype, PE). Fig. 1: 1~2

Species proxime affinis *A. squamigerae* (Mett.) Ching, differt lamina longiore quam latiore, bipinnatifida vel basi subbipinnata, stipite e basi sursum ut rhachi fere glabro, paleis

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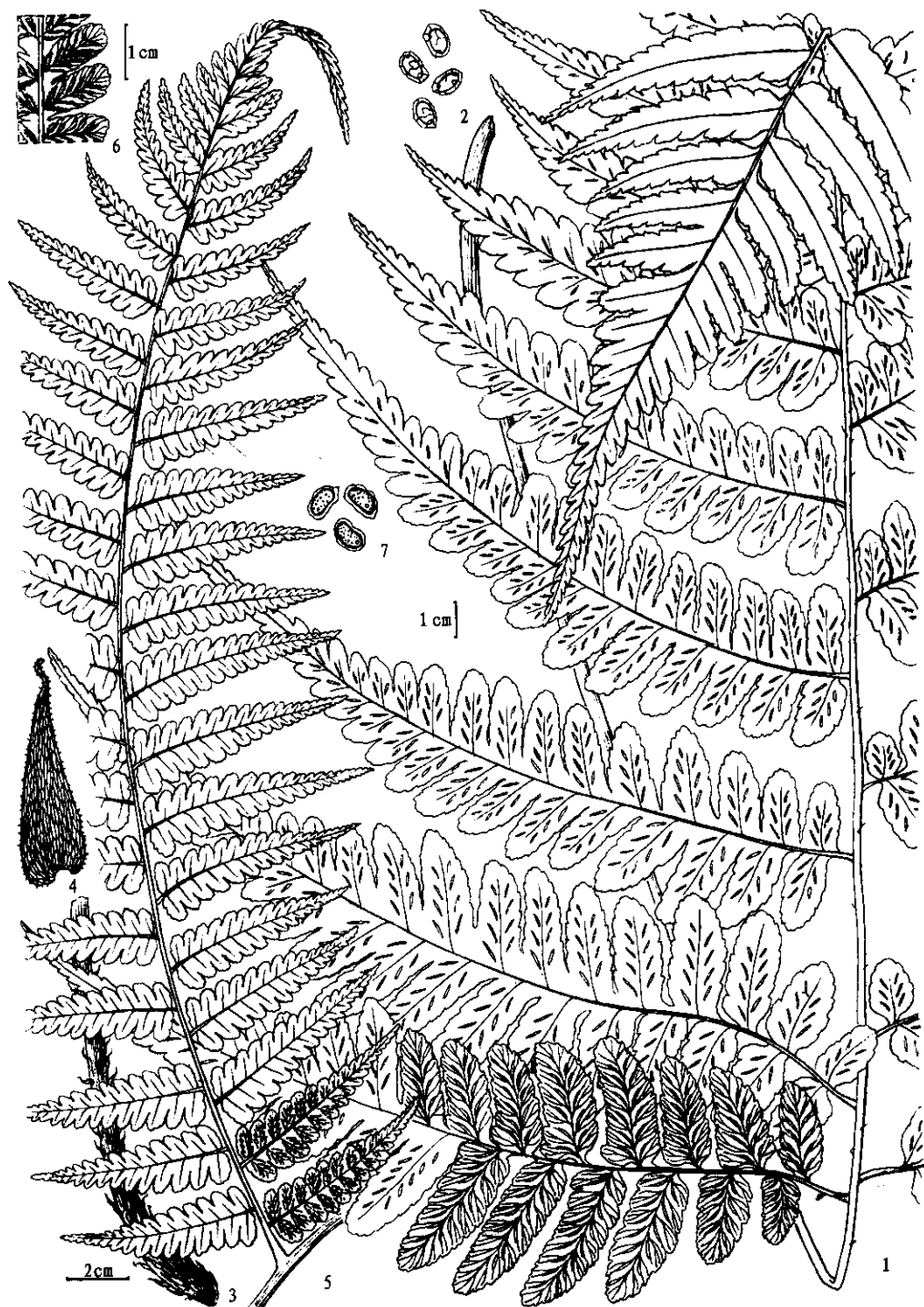


图1 1~2. 百山祖短肠蕨 1. 叶的一部分; 2. 孢子。3~7. 拟长果短肠蕨 3. 叶柄下部; 4. 叶柄下部的鳞片; 5. 一段叶轴及1个中部羽片; 6. 小羽片的一部分, 表示裂片形态、叶脉、孢子囊群及囊群盖的形态及着生位置; 7. 孢子。(蔡淑琴 绘)

Fig. 1 1~2. *Allantodia baishanzuensis* Ching et Chiu 1. Part of a frond; 2. Spores. 3~7. *Allantodia calogrammoides* Ching ex W. M. Chu et Z. R. He 3. Lower part of stipe; 4. Scale from lower part of stipe; 5. Part of rachis with a middle pinna; 6. Part of pinnule, showing lobes, veins, sori and indusia; 7. Spores.

integrus.

Frondes fertiles ad 80 cm longae. Stipes 25 ~ 33 cm longus, 1 ~ 2 mm crassus, stramineus paleis fuscis lanceolatis vel linearibus integris sparse vestitus; laminae ovato-deltoidae ad 45 cm longae, 30 cm latae, acuminatae, basi truncatae, bipinnatifidae; pinnae ad 10-jugae paulo obliquae, inferiores oblongo-lanceolatae, basi fere cordatae, petiolatae (petioli ad 1 cm longi), infimae majores ad 20 cm longae 7 cm latae profunde pinnatifidae vel subpinnatae; segmenta oblonga vel ovato-oblonga obtusa margine crenata interdum incisa, segmenta postica medianis longiora; pinnae superiores lanceolatae basi latiores latetruncatae sessilesque; venae subtus manifestae in segmento ad 10-jugae simplices vel furcatae vel raro pinnatae. Pagina frondis textura in sicco submembranacea obusure viridi subtus pallidiore glabraque. Sori breviter lineares, plerumque singulares, in parte mediana venarum siti; indusia brunnea, membranacea integra.

4 拟长果短肠蕨 新种 图 1: 3~7

Allantodia calogrammoides Ching ex W. M. Chu et Z. R. He, sp. nov. TYPE: Yunnan (云南), Jingdong (景东), Wuliangshan (无量山), Gongping (公平), under evergreen broad-leaf forest in valley, alt. 2300 m, 1979-09-23, W. M. Chu (朱维明) 9393 (holotype, PYU; isotype, PE, PYU). Fig. 1: 3~7

Species nova habitu *A. calogrammae* (Christ) Ching proxima, a qua differt rhizomate apice squamis patentibus dense oblecto, margine nigro squamae visibili, pinnulis basi cordatis, costis subtus spinulis viridibus carnosus carentibus, perisporio lato plicato.

Planta grandis sempervirens. Rhizoma decumbens vel ascendens, cum reliquis stipitum ad 5 cm diametro, apice cum basi stipitis squamis brunneis membranaceis lanceolatis ca. 1 cm longis margine nigris denticulatisque dense oblectum, frondibus approximatis. Frons fertilis ad 1.8 m longa; stipes ad 70 cm longus, ca. 8 mm diametro, basi brunneus sursum virescente stramineus glaber, supra leviter canaliculatus; lamina deltoidea, ad 1 m vel ultra longa, 80~90 cm lata, bipinnato-pinnatifida vel bipinnato-pinnatipartita; pinnae ca. 10~12-jugae, alternae, obliquae, subaequales, apice longe acuminatae pinnatilobatae, inferiores oblongo-lanceolatae pinnatae basi cordatae petiolatae, basales maximae ad 60 cm longae 20 cm latae, petiolis 2~3 cm longis, superiores late lanceolatae vel subsessiles; pinnulae ad 15-jugae, patentibus, alternae, late lanceolatae vel lanceolatae, breviter petiolatae vel superiores sessiles, ad 11 cm longae, 3 cm latae, apice acumminatae vel longe acumminatae, basi leviter cordatae vel cuneatae vel subtruncatae, lobo antico basali plerumque minore; lobi pinnularum ad 10-jugi, subpatentes, alterni, approximati, latiore oblongi, ca. 1.5 cm longi, 1 cm lati, apice rotundi, margine crenulati vel repanduli, venae supra indistinctae subtus visibiles, pinnatae, venulis ad 8-jugis pro lobo pinnulae plerumque bifurcatis vel simplicibus raro trifurcatis vel pinnatis obliquis. Pagina frondis textura herbacea, in sicco supra viridi subtus pallidiore, squamis minutis brunneolis sparse onusta; rhachidi et rhachidibus pinnarum stramineis glabris, supra canaliculatis, costis subtus laevibus. Sori lineares, fere recti, in segmento pin-



图2 1~2. 独山短肠蕨 1. 植株全形; 2. 孢子 3. 乌鳞短肠蕨; 1个叶。(蔡淑琴 绘)

Fig. 2 1~2. *Allantodia dushanensis* Ching ex W. M. Chu et Z. R. He 1. Plant;

2. Spores. 3. *Allantodia nigrosquamosa* Ching; frond.

nulae ad 6-jugi, e costulis ad $2/3 \sim 4/5$ longitudinis venularum protenti, infimis anterioribus

longioribus diplazioideisque; indusia linearia, brunnea, tenuiter membranacea, persistentia. Sporae reniformes, perisporiis latioribus vix plicatis.

Yunnan(云南): Jingdong(景东), Wuliangshan(无量山), Wenpu(温卜), under forest, alt. 2100 m, 1956-10-01, B. Y. Qiu(邱炳云)52469, (lacking rhizome and stipe's base); ib. under evergreen broad-leaf forest in valley, alt. 2200 m, 1979-09-19, W. M. Chu(朱维明)9288.

5 独山短肠蕨 新种 图 2: 1~2

Allantodia dushanensis Ching ex W. M. Chu et Z. R. He, sp. nov. TYPE: Guizhou(贵州), Dushan(独山), alt. 900 m, 1943-02-13, X. Y. Hou(侯学煜)1998(holotype, PE). Fig. 2: 1~2

Species habitu proxima *A. lobulosae* (Wall. ex Mett.) Ching, a qua differt pinnis lateralibus multo paucioribus (ad 8-jugis), margine pinnatifidis vel pinnatipartitis, soris pro segmento 2~3-jugis; in illa pinnis lateralibus ad 22-jugis, margine pinnatilobatis, soro pro segmento tantum uno.

Planta saxatilis. Rhizoma breve, ascendens, brunneum, apice paleis brunneis, ca. 3 mm longis, lanceolatis, membranaceis, margine integris dense obtectum; frondibus fasciculatis. Frondes fertiles 25~50 cm longae; stipes ad 23 cm longus, ca. 2 mm diametro, basi sparse paleaceus, supra basin virente stramineus et glaber; lamina deltoideo-ovata vel subdeltoidea, 10~30 cm longa, 8~20 cm lata, acuminata, pinnato-pinnatifida vel pinnato-pinnatipartita vel basi subbipinnata; pinnae 6~10-jugae, alternae, subpatentes, basales non abbreviatae, petiolatae(petiolo ad 5 mm longo), lanceolatae, ad 11 cm longae, 4 cm latae, acuminatae, pinnatifidae ad pinnatisectae, basi inaequales, antice auriculatae postice oblique cuneatae; lobi pinnarum ad 8-jugi, obliqui, approximati, ovati vel oblongi, ca. 5 mm longi latique, apice rotundati vel acuti, denticulatique, basales ad 2 cm longi, 1 cm lati, aliquanto fere liberi; venae subtus visibiles, in lobo 1~7-jugae, obliquae, basales antice bifurcatae, ceterae simplices. Pagina frondis textura herbacea, in sicco glauco-viridi, utrinque glabra. Sori lineares, leviter curvati, 3~6 mm longi, pro lobo 2~5-jugi, basalis anticus plerumque diplaziodes vel furcatus, raro unus; indusia linearia, brunnea, crasse membranacea, integra, persistentia. Sporae semiglobosae, perisporiis visibilibus pauce plicatis.

Guizhou(贵州): Pingtang(平塘), in limestone cave, alt. 600 m, 1851-01-07, X. Y. Hou 1851; Libo(荔波), Baiyan(白岩), alt. 500 m, J. Y. Han(韩见宇) et L. L. Zeng(曾莉莉)90364. **Guangxi**(广西): Longzhou(龙州), Banbi(板闭), 1956-04-24, Y. K. Lee(李荫昆)154.

6 黑鳞鳞轴短肠蕨 新变型

Allantodia hirtipes (Christ) Ching form. **nigropaleacea** Ching, form. nov. TYPE: Guizhou(贵州), Rongjiang(榕江), by stream side in ravine, 1959-08-04, Kweichow Bot. Exped. 3206(holotype, PE).

A typo differt stipite rachique paleis nigris, lucidis densissime obtectis.

Hunan (湖南): Xinning(新宁), in forest, alt. 1000 m, 1959-07-15, P. C. Tang(谭沛祥)63579.

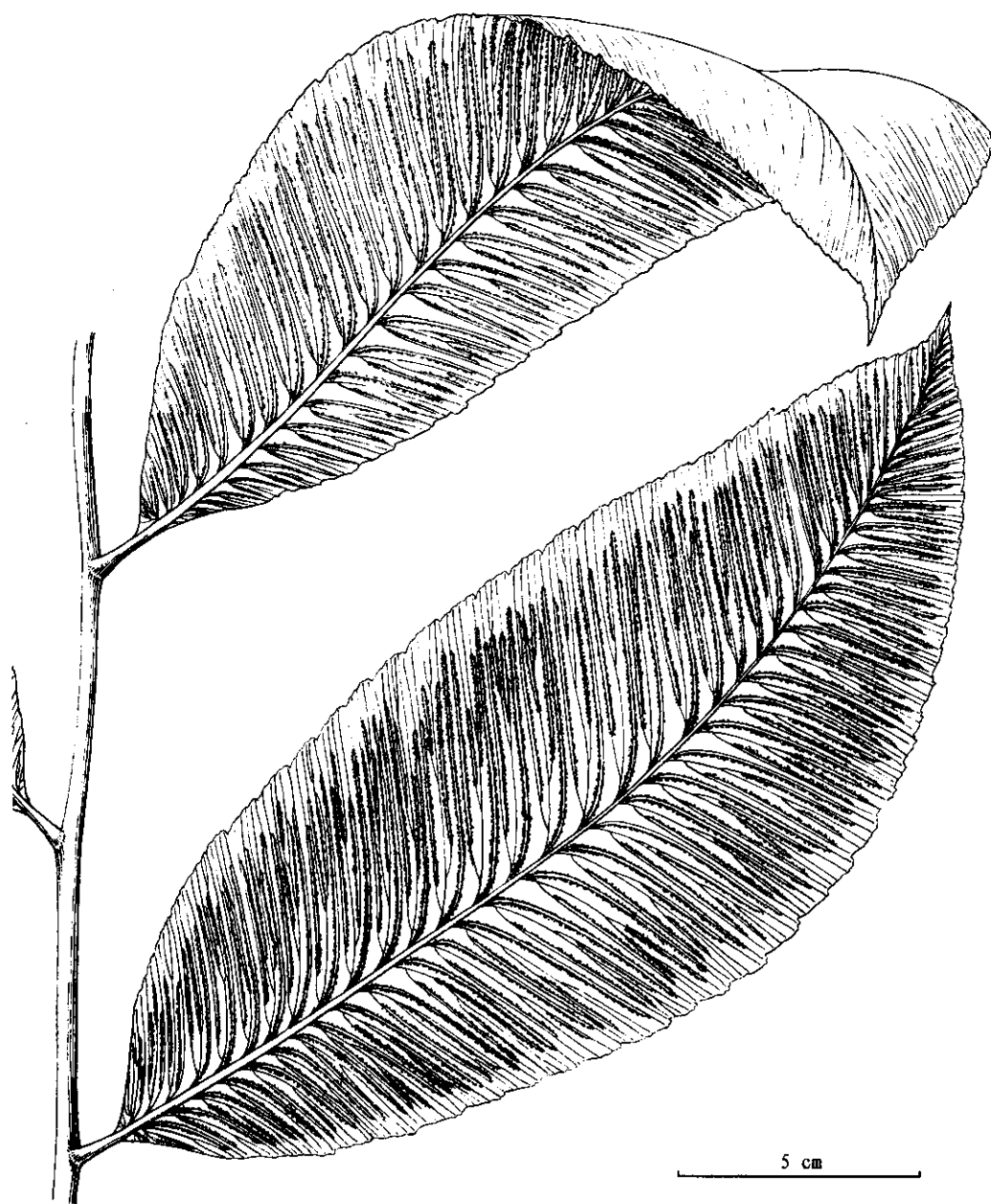


图3 缅甸双盖蕨, 示叶片下部一侧的两个羽片及一段叶轴。(蔡淑琴 绘)

Fig. 3 *Diplazium burmanicum* Ching, showing part of rachis with two lower pinnae.

7 乌鳞短肠蕨 新种 图2: 3

Allantodia nigrosquamosa Ching, sp. nov. TYPE: Yunnan(云南), Suijiang(绥江), 24 Ridges(二十四岗), by shaded stream side, alt. 1100 m, 1973-05-18, W. M. Chu(朱维

明)4877 (holotype, PYU; isotype, PE). Fig. 2: 3

Species affinis *A. wichurae* (Mett.) Ching, recedit stipite rhachique (parte inferiore) paleis nigrescentibus lanceolatis sat dense onustis, lamina textura tenuiter herbacea, pinnis inferioribus inter se magis remote separatis.

Rhizoma longe repens, cum stipite paleis nigrescentibus lanceolatis integris membranaceis sat dense obtectum; frondibus distantibus. Frondes fertiles ca. 60 cm longae; stipes ad 25 cm longus, 2.5 mm diametro, cineraceo-stramineus, sparse paleaceus; lamina late lanceolata, ad 38 cm longa, basi rotunda, 12 cm lata, apice acuminata, pinnata; pinnae ca. 15-jugae, oblique patentibus, valde falcatae, lanceolatae, 6~7 cm longae, 1.5 cm latae, longe acuminatae, basi inaequales, postice cuneatae, antice truncatae et prominente auriculatae, margine duplicato-crenato-serratae; venae in lobulo 5, simplices, obliquae, utrinque visibiles. Pagina frondis textura tenuiter herbacea, utrinque glabra, rhachis praecipue parte inferiore sat dense paleacea. Sori lineares, in lobis secus venulam infimam acroscopicam medio positi; indusia linearia, pallide brunnea, membranacea, integra, persistentia.

8 缅甸双盖蕨 新种 图 3

Diplazium burmanicum Ching, sp. nov. TYPE: Myanmar bor. (缅甸北部), Sumpura Bum(孙布拉蚌), alt. 914.4 m, 1953-02-04, F. Kingdon-wad 20481 (holotype, PE), a large stiff fern, fronds 1.2~1.5 m. tall, in a deep ravine. Fig. 3

Species insignis ab omnibus affinibus differt statura multo robustiore (2.4~3 m alta), pinnis ampla (ad 30 cm longis, 12 cm latis), late elliptica et longe petiolata.

Planta robusta, 2.4~3 m alta. Frondes fasciculatae; stipes ad 1 m longus, ca. 5 mm diametro, stramineus, basi paleaceus, sursum glaber; lamina ampla, oblonga 1.4~1.7 m longa, ca. 25~30 cm lata, impari-pinnata; pinnae laterales ca. 10~14-jugae, alternae, 9~10 cm inter se remotae, late ellipticae 28~30 cm longae, ad 12 cm medio latae, apice breviter acutae, basi rotundo-cuneatae, petiolis 1.2 cm longis suffultae, margine obscure et remote serrulatae, textura chartacea, supra virides, subtus pallidiores, glabrae; venae liberae, utrinque visibiles, e costae patulae, venulis 5~6 in quoque fasciculo, parallelis, omnibus soriferis. Sori lineares densi, e costa usque ad ca. 1 cm a marginem protensi; indusia diplazioidea, membranacea, angustata, brunnea, demum delapsa.